

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/743,1070
Source: IFW16
Date Processed by STIC: 12/10/04

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 12/10/2004

PATENT APPLICATION: US/09/743,107D

TIME: 11:42:47

Input Set : A:\003300-723.txt

Output Set: N:\CRF4\12102004\I743107D.raw

4 <110> APPLICANT: Hanson, Lars A.
5 Baltzer, Lars
6 Mattsby-Baltzer, Inger
7 Dolphin, Gunnar T.
9 <120> TITLE OF INVENTION: Peptides Based on the Sequence of Human Lactoferrin
10 and Their Use
12 <130> FILE REFERENCE: 003300-723
14 <140> CURRENT APPLICATION NUMBER: US 09/743,107D
15 <141> CURRENT FILING DATE: 2001-08-21
17 <150> PRIOR APPLICATION NUMBER: PCT/SE99/01230
18 <151> PRIOR FILING DATE: 2000-09-29
20 <150> PRIOR APPLICATION NUMBER: SE 9802441-7
21 <151> PRIOR FILING DATE: 1998-07-06
23 <150> PRIOR APPLICATION NUMBER: SE 9802562-0
24 <151> PRIOR FILING DATE: 1998-07-17
26 <150> PRIOR APPLICATION NUMBER: SE 9804614-7
27 <151> PRIOR FILING DATE: 1998-12-29
29 <160> NUMBER OF SEQ ID NOS: 102
31 <170> SOFTWARE: PatentIn version 2.1
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 25
35 <212> TYPE: PRT
36 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <221> NAME/KEY: MOD_RES
40 <222> LOCATION: (1)
41 <223> OTHER INFORMATION: ACETYLTATION
43 <220> FEATURE:
44 <221> NAME/KEY: PEPTIDE
45 <222> LOCATION: (1)
46 <223> OTHER INFORMATION: Amino acid 1 is Xaa wherein Xaa = Glu or no amino acid.
48 <220> FEATURE:
49 <221> NAME/KEY: PEPTIDE
50 <222> LOCATION: (2)
51 <223> OTHER INFORMATION: Amino acid 2 is Xaa wherein Xaa = Ala or no amino acid.
53 <220> FEATURE:
54 <221> NAME/KEY: PEPTIDE
55 <222> LOCATION: (5)
56 <223> OTHER INFORMATION: Amino acid 5 is Xaa wherein Xaa = Cys or Ala.
58 <220> FEATURE:
59 <221> NAME/KEY: PEPTIDE
60 <222> LOCATION: (7)
61 <223> OTHER INFORMATION: Amino acid 7 is Xaa wherein Xaa = Gln or Lys.

p6

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,107D

DATE: 12/10/2004

TIME: 11:42:47

Input Set : A:\003300-723.txt

Output Set: N:\CRF4\12102004\I743107D.raw

```

63 <220> FEATURE:
64 <221> NAME/KEY: PEPTIDE
65 <222> LOCATION: (11)
66 <223> OTHER INFORMATION: Amino acid 11 is Xaa wherein Xaa = Asn or Asp.
68 <220> FEATURE:
69 <221> NAME/KEY: PEPTIDE
70 <222> LOCATION: (17)..(25)
71 <223> OTHER INFORMATION: Amino acids 17-25 are Xaa wherein Xaa = Gly, Pro, Pro, Val,
Ser,
72     Cys, Ile, Lys, Arg
74 <220> FEATURE:
75 <221> NAME/KEY: MOD_RES
76 <222> LOCATION: (25)
77 <223> OTHER INFORMATION: AMIDATION
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or artificial
81     origin, corresponding to modification of the sequence
82     consisting of aa 16-40 in human lactoferrin
84 <400> SEQUENCE: 1
W--> 86 Xaa Xaa Thr Lys Xaa Phe Xaa Trp Gln Arg Xaa Met Arg Lys Val Arg
87 1             5             10             15
W--> 89 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
90             20             25
92 <210> SEQ ID NO: 2
93 <211> LENGTH: 25
94 <212> TYPE: PRT
95 <213> ORGANISM: Artificial Sequence
97 <220> FEATURE:
98 <221> NAME/KEY: MOD_RES
99 <222> LOCATION: (1)
100 <223> OTHER INFORMATION: ACETYLATION
102 <220> FEATURE:
103 <221> NAME/KEY: MOD_RES
104 <222> LOCATION: (25)
105 <223> OTHER INFORMATION: AMIDATION
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
109     artificial origin, corresponding to a modification
110     of the sequence consisting of amino acids 16-40 in
111     human lactoferrin
113 <400> SEQUENCE: 2
114 Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg
115 1             5             10             15
117 Gly Pro Pro Val Ser Cys Ile Lys Arg
118             20             25
122 <210> SEQ ID NO: 3
123 <211> LENGTH: 25
124 <212> TYPE: PRT
125 <213> ORGANISM: Artificial Sequence
127 <220> FEATURE:

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,107D

DATE: 12/10/2004

TIME: 11:42:47

Input Set : A:\003300-723.txt

Output Set: N:\CRF4\12102004\I743107D.raw

```

128 <221> NAME/KEY: MOD_RES
129 <222> LOCATION: (1)
130 <223> OTHER INFORMATION: ACETYLATION
132 <220> FEATURE:
133 <221> NAME/KEY: MOD_RES
134 <222> LOCATION: (25)
135 <223> OTHER INFORMATION: AMIDATION
137 <220> FEATURE:
138 <221> NAME/KEY: DISULFID
139 <222> LOCATION: (5)..(22)
141 <220> FEATURE:
142 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
143     artificial origin, corresponding to a modification
144     of the sequence consisting of amino acids 16-40 in
145     human lactoferrin
147 <400> SEQUENCE: 3
148 Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg
149   1           5           10           15
151 Gly Pro Pro Val Ser Cys Ile Lys Arg
152           20           25
156 <210> SEQ ID NO: 4
157 <211> LENGTH: 23
158 <212> TYPE: PRT
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <221> NAME/KEY: MOD_RES
163 <222> LOCATION: (1)
164 <223> OTHER INFORMATION: ACETYLATION
166 <220> FEATURE:
167 <221> NAME/KEY: MOD_RES
168 <222> LOCATION: (23)..(23)
169 <223> OTHER INFORMATION: AMIDATION
171 <220> FEATURE:
172 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
173     artificial origin, corresponding to a modification
174     of the sequence consisting of amino acids 18-40 in
175     human lactoferrin
177 <400> SEQUENCE: 4
178 Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg Gly Pro
179   1           5           10           15
181 Pro Val Ser Cys Ile Lys Arg
182           20
186 <210> SEQ ID NO: 5
187 <211> LENGTH: 23
188 <212> TYPE: PRT
189 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <221> NAME/KEY: MOD_RES
193 <222> LOCATION: (1)

```

RAW SEQUENCE LISTING

DATE: 12/10/2004

PATENT APPLICATION: US/09/743,107D

TIME: 11:42:47

Input Set : A:\003300-723.txt

Output Set: N:\CRF4\12102004\I743107D.raw

```

194 <223> OTHER INFORMATION: ACETYLTATION
196 <220> FEATURE:
197 <221> NAME/KEY: MOD_RES
198 <222> LOCATION: (23)
199 <223> OTHER INFORMATION: AMIDATION
201 <220> FEATURE:
202 <221> NAME/KEY: DISULFID
203 <222> LOCATION: (3)..(20)
205 <220> FEATURE:
206 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
207     artificial origin, corresponding to a modification
208     of the sequence consisting of amino acids 18-40 in
209     human lactoferrin
211 <400> SEQUENCE: 5
212 Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg Gly Pro
213   1           5           10           15
215 Pro Val Ser Cys Ile Lys Arg
216           20
220 <210> SEQ ID NO: 6
221 <211> LENGTH: 14
222 <212> TYPE: PRT
223 <213> ORGANISM: Artificial Sequence
225 <220> FEATURE:
226 <221> NAME/KEY: MOD_RES
227 <222> LOCATION: (1)
228 <223> OTHER INFORMATION: ACETYLTATION
230 <220> FEATURE:
231 <221> NAME/KEY: MOD_RES
232 <222> LOCATION: (14)
233 <223> OTHER INFORMATION: AMIDATION
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
237     artificial origin, corresponding to a modification
238     of the sequence consisting of amino acids 18-31 in
239     human lactoferrin
241 <400> SEQUENCE: 6
242 Thr Lys Ala Phe Lys Trp Gln Arg Asp Met Arg Lys Val Arg
243   1           5           10
247 <210> SEQ ID NO: 7
248 <211> LENGTH: 14
249 <212> TYPE: PRT
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <221> NAME/KEY: MOD_RES
254 <222> LOCATION: (1)
255 <223> OTHER INFORMATION: ACETYLTATION
257 <220> FEATURE:
258 <221> NAME/KEY: MOD_RES
259 <222> LOCATION: (14)

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,107D

DATE: 12/10/2004

TIME: 11:42:47

Input Set : A:\003300-723.txt

Output Set: N:\CRF4\12102004\I743107D.raw

260 <223> OTHER INFORMATION: AMIDATION
 262 <220> FEATURE:
 263 <221> NAME/KEY: BINDING
 264 <222> LOCATION: (5)..(9)
 265 <223> OTHER INFORMATION: LACTAM
 267 <220> FEATURE:
 268 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
 269 artificial origin, corresponding to a modification
 270 of the sequence consisting of aa 18-31 in human
 271 lactoferrin; a lactam is formed between aa 5 and 9
 273 <400> SEQUENCE: 7
 274 Thr Lys Ala Phe Lys Trp Gln Arg Asp Met Arg Lys Val Arg
 275 1 5 10
 279 <210> SEQ ID NO: 8
 280 <211> LENGTH: 20
 281 <212> TYPE: PRT
 282 <213> ORGANISM: Artificial Sequence
 284 <220> FEATURE:
 285 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide of
 286 natural or artificial origin consisting of the
 287 amino acids in positions 12-31 of the protein
 288 human lactoferrin
 290 <400> SEQUENCE: 8
 291 Val Ser Gln Pro Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met
 292 1 5 10 15
 294 Arg Lys Val Arg
 295 20
 299 <210> SEQ ID NO: 9
 300 <211> LENGTH: 7
 301 <212> TYPE: PRT
 302 <213> ORGANISM: Artificial Sequence
 304 <220> FEATURE:
 305 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide of
 306 natural or artificial origin consisting of the
 307 amino acids in positions 12-18 of the protein
 308 human lactoferrin
 310 <400> SEQUENCE: 9
 311 Val Ser Gln Pro Glu Ala Thr
 312 1 5
 316 <210> SEQ ID NO: 10
 317 <211> LENGTH: 7
 318 <212> TYPE: PRT
 319 <213> ORGANISM: Artificial Sequence
 321 <220> FEATURE:
 322 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide of
 323 natural or artificial origin consisting of the
 324 amino acids in positions 13-19 of the protein
 325 human lactoferrin
 327 <400> SEQUENCE: 10

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: **US/09/743,107D**

DATE: 12/10/2004
TIME: 11:42:48

Input Set : **A:\003300-723.txt**

Output Set: **N:\CRF4\12102004\I743107D.raw**

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1,2,5,7,11,17,18,19,20,21,22,23,24,25

Seq#:43; Xaa Pos. 2,4,6,10

Seq#:87; Xaa Pos. 5

Seq#:88; Xaa Pos. 5

Seq#:89; Xaa Pos. 7

Seq#:90; Xaa Pos. 7

Seq#:99; Xaa Pos. 3,4,5,6,7,8,9

VERIFICATION SUMMARYPATENT APPLICATION: **US/09/743,107D**

DATE: 12/10/2004

TIME: 11:42:48

Input Set : **A:\003300-723.txt**Output Set: **N:\CRF4\12102004\I743107D.raw**

L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16
L:904 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:1807 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:0
L:1830 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88 after pos.:0
L:1853 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0
L:1876 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:90 after pos.:0
L:2088 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:0